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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/763,850 | 01/23/2004 | Tomoyuki Kugo | 71524 CCD | 8524 |

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| EXAMINER | |
|---|---|
| EVANISKO, LESLIE J | |
| ART UNIT | PAPER NUMBER |
| 2854 | |

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/763,850 | KUGO ET AL. | |
| | Examiner | Art Unit | |
| | Leslie J. Evanisko | 2854 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *23 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,8,10 and 16* is/are rejected.

7)☒ Claim(s) *6,7,9 and 11-15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/23/04 & 4/26/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Specification*

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Objections*

2. Claims 3-4 are objected to because of the following informalities: With respect to claim 3, it is suggested that the term --thermosensitive-- be inserted before "adhesive" in line 3 to insure consistent terminology is used throughout the claims.

Appropriate correction and/or clarification is required.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (EP 0370642 A1) in view of Adams et al. (US 6,210,054 B1). Jones et al. teach a method for issuing a label comprising feeding a first label sheet (i.e., web 12) comprising a support and a thermosensitive adhesive layer located overlying one side of the support (see column 1, lines 10-25), wherein the first label sheet has a timing mark 108 on the thermosensitive adhesive layer (see column 6, lines 11-13 and column 8, lines 9-14), detecting the timing mark (with sensor 64A), and cutting or semi-cutting the first label sheet to produce a second label sheet (i.e., cut labels--see column 2, lines 22-28). Note, as shown in Figure 6, the timing mark 108 is present at a position other than the corners of the second label sheet. Although Jones et al. is silent with respect to the particular ratio of the area of the timing mark to the area of the second label sheet, note Adams et al. teach a

label including a timing mark 16 on a thermosensitive adhesive layer 14 located at a position other than the corners of the label sheet, wherein the ratio of the area of the timing mark to an area of the second label sheet falls within the range from 0.5% to 35%. See, in particular, Figure 3B and column 3, line 65 through column 4, line 4. In particular, the area of the second label sheet =1.5 in X 1.5 in=2.25 $in^2$ and the area of the timing mark = 0.2 in X 0.4 in=0.08 $in^2$. The ratio therefore is equal to 0.08/2.25 X 100 = 3.55%. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the timing mark of Jones et al. with the dimensional relationship to the second label sheet as set forth by Adams et al. in order to minimize the amount of ink covering the adhesive (and causing loss of tack) and to insure there is less ink showing through the label.

With respect to claim 2, note an outer edge (i.e., the upper outer edge) of the timing mark as shown in both Jones et al. and Adams et al. is apart from the outer edge of the thermosensitive adhesive layer of the second label sheet (which extends to the edge of the label), as shown in Figure 6 of Jones et al. and Figures 3A or 3B of Adams et al.

With respect to claims 3 and 4, to the extent that applicant has defined what is meant by "outer edge" and "side edge" of the adhesive layer, note the upper outer edge of the timing mark as shown in Adams et al. is 0.4 inches (0.4 in = 10.16 mm--i.e., which satisfies the recitation of being at least 5 mm)

apart from a nearest "outer" or "side" edge of the adhesive layer, which extends to the lower edge of label sheet, as shown in Figures 3A and 3B.

With respect to claim 16, note Jones et al. in view of Adams et al. render obvious a label issued by the method of claim 1. It is noted that this claim is a product by process claim. Since Jones et al. in view of Adams et al. teach a label having all of the structural limitations set forth by claim 1, Jones et al. in view of Adams et al. render obvious the claim language as recited.

6. Claims 5, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. in view of Adams et al. as applied to claims 1-4 and 16 above, and further in view of Ichikawa et al. (US 6,501,495). Jones et al. in view of Adams et al. teach a method of issuing a label as recited with the exception of the label including a thermosensitive recording layer formed overlying the other side of the support. Ichikawa et al. teach a thermosensitive adhesive label including a thermosensitive recording layer 4 positioned opposite to the thermosensitive adhesive layer is well known in the art in Figure 2 and column 8, line 64 through column 9, line 9. IN view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the label material of Jones et al. as modified by Adams et al. to include a thermosensitive recording layer as taught by Ichikawa et al. to allow for clearer and easier printing of an image onto the label member.

With respect to claim 8, Jones et al. in view of Adams et al. teach a method as recited with the exception of heating the thermosensitive adhesive to activate the adhesive layer after cutting or semi-cutting the first label sheet. In particular, note that Jones et al. is relatively silent to the details of the embodiment including the thermosensitive adhesive layer and how it is used in the method (see, for example, column 1, lines 13-16). Ichikawa et al. teach a thermosensitive adhesive labeling method including the step of heating the thermosensitive adhesive layer on the label to activate the thermosensitive adhesive layer after cutting or semi-cutting the first label sheet. See, in particular, Figure 1 which shows the thermal head for activating the adhesive is located downstream from the cutting mechanism 10 and column 11, lines 37-60. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide a mechanism in Jones et al. as modified by Adams et al. for first cutting the label web and then heating the adhesive layer to activate it as taught by Ichikawa et al. in order to activate the adhesive layer of the label directly before it is to attached to the object to be labeled to avoid problems with the label becoming inadvertently stuck to other structure in the printer/labeler mechanism.

With respect to claim 10, Jones et al. in view of Adams et al. teach a method as recited with the exception of the particular details of the composition of the thermosensitive adhesive layer. Note both Jones et al. and Adams et al. are silent with respect to the composition of the adhesive layer.

However, Ichikawa et al. teach a thermosensitive adhesive label including a silicone modified thermoplastic resin and a solid plasticizer is well known in the art, as exemplified by Ichikawa et al. in column 9, line 51 through column 10, line 33. IN view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the adhesive layer of Jones et al. as modified by Adams et al. with the particular composition as taught by Ichikawa et al., as it would simply require the obvious selection of a known adhesive composition based upon its known properties to provide an improved label member which becomes adhesive only after application of heat.

***Allowable Subject Matter***

7. Claims 6-7, 9, and 11-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 6 and 7, the prior art of record fails to teach or fairly suggest a method of issuing a label having all of the steps as recited, in combination with and particularly including, a step of heating the thermosensitive recording layer to record an image, wherein the heating of the thermosensitive recording layer being dependent upon at least the detection of the timing mark.

With respect to claims 9, 11, and 12, the prior art of record fails to teach or fairly suggest a method of issuing a label having all of the steps as recited, in combination with and particularly including, the particular details of the composition (i.e., type of ink or specific ink composition) or characteristics (i.e., reflectivity) of the timing mark printed upon the thermosensitive adhesive layer.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Davies (US 3,891,324) and Schwenzer (US 4,397,709) each teach a labeling method including a label including a thermosensitive adhesive and timing marks which has obvious similarities to the claimed subject matter.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Leslie J. Evanisko** whose telephone number is **(571) 272-2161**. The examiner can normally be reached on M-Th 7:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leslie J. Evanisko
Primary Examiner
Art Unit 2854

lje
April 17, 2005